

## Billable Services Detail

Reporting Period: 6/1/2015 - 11/30/2015

<b>Date</b>	<b>Project</b>	<b>Task</b>	<b>Name</b>	<b>Description</b>	<b>Hours</b>
6/1/2015 9:00 AM	Topology Redesign and Extension	Topology Redesign In-Kind Labor	Fred	Document extenuating circumstances and strategic importance for GDA change order and timeline extension (1/2 actual time).	0.50
6/6/2015 9:00 AM	Topology Redesign and Extension	Topology Redesign In-Kind Labor	Fred	Complete and document new project timeline for remaining poles, links and adoption (1/2 actual time).	2.50
6/8/2015 9:00 AM	Topology Redesign and Extension	Topology Redesign In-Kind Labor	Fred	Model coverage from Mountain pole north to identify potential paths to fiber pole (1/2 actual time).	0.75
6/12/2015 9:00 AM	Topology Redesign and Extension	Topology Redesign In-Kind Labor	Fred	Modify fiber pole-mast-azimuth template for new pole locations and CPE coverages (1/2 actual time).	0.50
6/15/2015 9:00 AM	Topology Redesign and Extension	Topology Redesign In-Kind Labor	Fred	Install cabling for PtP radios; adjust sector coverages to support new topology (1/2 actual time).	0.75
7/25/2015 9:00 AM	Topology Redesign and Extension	Topology Redesign In-Kind Labor	Fred	Render multiple coverages for new Garnet pole; and multiple links in three bands between multiple pole site options (1/2 actual time).	1.00
8/26/2015 9:00 AM	Topology Redesign and Extension	Topology Redesign In-Kind Labor	Fred	Complete link path analyses in multiple bands, for Th2 Valley Relay pole to Fiber and Mountain poles (1/2 actual time).	1.00
8/29/2015 9:00 AM	Topology Redesign and Extension	Topology Redesign In-Kind Labor	Fred	Point to point radio testing in two bands	1.50

				between fiber pole and two relay pole sites (1/2 actual time).	
8/31/2015 9:00 AM	Topology Redesign and Extension	Topology Redesign In-Kind Labor	Fred	Re-test 900 MHz PtP link to relay pole with reduced power; verify performance and lack of interference with TVWS CPE (1/2 actual time).	0.50
9/18/2015 9:00 AM	Topology Redesign and Extension	Topology Redesign In-Kind Labor	Fred	Test PtP links with Redline TVWS / MIMO / OFDM radios; between Mountain, Fiber and relay pole sites. Confirm requirement for relay pole (1/2 actual time).	1.00
9/22/2015 9:00 AM	Topology Redesign and Extension	Topology Redesign In-Kind Labor	Fred	Reconfigure Redline PtP radios for Fiber - Garnet testing; install permanent option keys and backup configurations (1/2 actual time).	0.50
10/15/2015 9:00 AM	Topology Redesign and Extension	Topology Redesign In-Kind Labor	Fred	Install temporary Fiber - Mountain link to support TVWS test link to Combs; adjust Fiber - Garnet link to optimize both (1/2 actual time).	1.50
10/26/2015 9:00 AM	Topology Redesign and Extension	Topology Redesign In-Kind Labor	Fred	Test multiple radios for PtP links between Combs, Mountain and Valley poles (1/2 actual time).	2.00
10/27/2015 9:00 AM	Topology Redesign and Extension	Topology Redesign In-Kind Labor	Fred	Additional PtP measurements and optimizations between Combs and Mountain poles; test from Barton Road as reference (1/2 actual time).	1.50
10/30/2015 9:00 AM	Topology Redesign and Extension	Topology Redesign In-Kind Labor	Fred	Multiple PtP tests between Mountain and Combs poles (1/2 actual time).	2.00
11/5/2015 9:00 AM	Topology Redesign and Extension	Topology Redesign In-Kind Labor	Fred	Test multiple antenna options between Fiber	1.00

11/6/2015 9:00 AM	Topology Redesign and Extension	Topology Redesign In-Kind Labor	Fred	and Valley poles; re-configure and install additional PtP radios for Valley to Groff testing (1/2 actual time). Test multiple PtP radios between Valley, Combs and Groff poles (1/2 actual time).	1.00
11/9/2015 9:00 AM	Topology Redesign and Extension	Topology Redesign In-Kind Labor	Fred	Perform multiple PtP measurements and antenna optimizations between Mountain, Valley, Fiber and Groff poles; add up-tilt to Garnet sector to test elevated coverage (1/2 actual time).	2.00
11/17/2015 9:00 AM	Topology Redesign and Extension	Topology Redesign In-Kind Labor	Fred	Test and optimize Valley Road antenna locations, channel size and power for maximum throughput and minimum co-interference (1/2 actual time).	2.00
<b>Total:</b>					<b>23.50</b>

19 records returned. Generated on 11/30/2015 4:54PM.